



**Town of Hilton Head Island
Circle to Circle Committee**

Wednesday, March 9, 2016

8:30 a.m.

Benjamin M. Racusin Council Chambers

REVISED AGENDA

As a Courtesy to Others Please Turn Off All Cell Phones and Pagers during the Meeting.

1. Call to Order

2. Freedom of Information Act Compliance

Public notification of this meeting has been published and posted in compliance with the Freedom of Information Act and the Town of Hilton Head Island requirements.

3. Approval of Agenda

4. Approval of Minutes – February 24, 2016 Meeting

5. New Business

- Design Workshop Consulting Update on Decision Matrix
- Pathway Review
- Upcoming Meeting Dates

6. Appearance by Citizens

7. Meeting Summary and Topics for Next Meeting

8. Adjournment

Please note that a quorum of Town Council may result if four or more of their members attend this meeting.

Circle to Circle Committee

Draft Meeting Minutes

February 24, 2016

8:30 a.m.

Council Chambers, Town Hall

Circle to Circle Committee Members present:	Jim Gant (Chairman), Jack Daly, David Ames, Judd Carstens, Leslie Richardson, Paul Crunkleton, Mike Thomas, Kyle Theodore, Tom Lennox
Town Staff present:	Charles Cousins, Shawn Colin, Brian Hulbert, Jeff Buckalew, Darrin Shoemaker, Jennifer Ray, Shea Farrar

- Chairman Gant began the meeting at 8:36 a.m.
- The minutes from the February 10, 2016 meeting will be revisited once a quorum is present, with more members expected to arrive.
- Prior to introducing the first item of New Business, Chairman Gant addressed a concern that was raised prior to the meeting regarding the potential of a recommendation by the Committee for an additional gate to Sea Pines on Point Comfort Road. Chairman Gant acknowledged that the Committee was in the process of evaluating a variety of potential traffic solutions in the Circle to Circle Area, but clarified that the suggestion, although it did arise as an idea in the series of Community Forums held last May, would necessarily be an issue for the private community to pursue.
- Chairman Gant then introduced the first item of New Business: Traffic Review.
- Mr. Shawn Colin, Deputy Director of Community Development, presented an overview of the transportation model and method used to generate the estimated future traffic volumes used to evaluate the potential mitigation options that will be presented.
- Mr. Todd Salvagin, Principal of SRS Engineering, followed with a presentation of potential mitigation options for the traffic conditions estimated for 2030, focused on Sea Pines Circle, which is included with these minutes.
- The Urban Planning Consultants for the Committee from Design Workshop then gave a brief overview of an assessment matrix that is being developed to help the

Committee though evaluating these and other options and provided examples of conceptual graphics that can be used to help assess the visual impact of potential solutions.

- Following public comments, the minutes were approved with a quorum of members present.
- Chairman Gant adjourned the meeting at 10:31 a.m.

Meeting date: February 24, 2016

Approved:

Chairman: _____
Jim Gant

Submitted by: Shea Farrar

REVIEW

LEVEL-OF-SERVICE SUMMARY¹

Intersection	Peak Hour	Approach	2015 Existing	5-Year (2020)
			Delay ²	Delay
Seapines Circle	AM	EB: Greenwood Dr	184.1	280.3
		WB: US 278B	88.5	160.8
		NB: Pope Ave	21.7	37.1
		SB: PBR	164.9	240.5
	NOON	Greenwood Dr	156.9	210.8
		US 278B	190.2	286.3
		Pope Ave	84.8	129.4
		PBR	179.5	267.0
	PM	Greenwood Dr	174.9	280.9
		US 278B	183.6	294.5
		Pope Ave	129.6	183.7
		PBR	98.7	174.5

1. Calculations completed using the 2010 HCM methodology.

2. Delay in seconds-per-vehicle.

2030 PROJECTIONS

ROADWAY SEGMENTS	2015 VOLUMES MODELED (vpd)	2030 VOLUMES MODELED (vpd)
Palmetto Bay Road	26,889	31,490
US 278 B E/o Arrow	20,894	22,309
Greenwood Drive	15,613	17,863
Pope Ave @ Sea Pines	27,187	30,267
Pope Ave	27,388	31,054
New Orleans Rd	2,249	3,442
Office Park Rd W/o Pope	3,307	3,842
Office Park Rd S/o Greenwood	4,962	5,771
Cordillo Parkway	10,566	11,395
North Forest Beach	3,265	3,406
South Forest Beach	7,932	10,096
Arrow Rd N/o US 278 B	5,977	7,358

PROJECTED GROWTH

North Forest Beach Road	2% per Year
South Forest Beach Road	2% per Year
New Orleans Road/Office Park	2.5% per Year
Major Corridors	1.2% per Year

2030 CIRCLE OPERATIONS

LEVEL-OF-SERVICE SUMMARY¹

Intersection	Peak Hour	Approach	2015 Existing Delay ²	5-Year (2020) Delay	15-Year (2030) Delay
Seapines Circle	AM	EB: Greenwood Dr	184.1	280.3	476.2
		WB: US 278B	88.5	160.8	273.9
		NB: Pope Ave	21.7	37.1	81.6
		SB: PBR	164.9	240.5	363.9
	NOON	EB: Greenwood Dr	156.9	210.8	349.1
		WB: US 278B	190.2	286.3	435.9
		NB: Pope Ave	84.8	129.4	221.0
		SB: PBR	179.5	267.0	401.8
	PM	EB: Greenwood Dr	174.9	280.9	453.1
		WB: US 278B	183.6	294.5	446.2
		NB: Pope Ave	129.6	183.7	286.3
		SB: PBR	98.7	174.5	272.8

2030 NW CONNECTOR

ROADWAY SEGMENTS	2030 VOLUMES MODELED	2030 VOLUMES Northwest Connector
<u>Seapines Circle Area</u>		
Palmetto Bay Road	31,490	27,574
US 278 B	19,504	18,920
Greenwood Drive	17,863	11,974
Pope Ave	30,267	28,949
<u>Other Roadways</u>		
Pope Ave	31,054	30,975
New Orleans Rd	3,442	3,781
Office Park Rd W/o Pope	3,842	2,915
Office Park Rd S/o Greenwood	5,771	6,679
Northwest Connector		10,310 (Three-Lane Connector)

2030 NW CONNECTOR OPERATIONS

LEVEL-OF-SERVICE SUMMARY¹

Intersection	Peak Hour	Approach	2015 Existing Delay ²	5-Year (2020) Delay	15-Year (2030) Delay	MITIGATED	
						5-Year NW Connector	15-Year NW Connector
Seapines Circle	AM	EB: Greenwood Dr	184.1	280.3	476.2	198.1	361.8
		WB: US 278B	88.5	160.8	273.9	131.4	231.3
		NB: Pope Ave	21.7	37.1	81.6	28.6	62.6
		SB: PBR	164.9	240.5	363.9	266.1	402.7
	NOON	EB: Greenwood Dr	156.9	210.8	349.1	174.1	304.9
		WB: US 278B	190.2	286.3	435.9	251.4	386.0
		NB: Pope Ave	84.8	129.4	221.0	107.5	188.9
		SB: PBR	179.5	267.0	401.8	299.3	450.4
	PM	EB: Greenwood Dr	174.9	280.9	453.1	173.7	305.1
		WB: US 278B	183.6	294.5	446.2	239.3	366.4
		NB: Pope Ave	129.6	183.7	286.3	142.6	227.7
		SB: PBR	98.7	174.5	272.8	198.7	310.7

2030 FLY-OVER

LEVEL-OF-SERVICE SUMMARY¹

Intersection	Peak Hour	Approach	MITIGATED			
			5-Year NW Connector	15-Year NW Connector	5-Year Flyover	15-Year NW Flyover
Seapines Circle	AM	EB: Greenwood Dr	198.1	361.8	88.2	182.7
		WB: US 278B	131.4	231.3	75.5	147.5
		NB: Pope Ave	28.6	62.6	7.4	10.5
		SB: PBR	266.1	402.7	31.8	70.8
	NOON	EB: Greenwood Dr	174.1	304.9	85.7	162.7
		WB: US 278B	251.4	386.0	145.7	153.6
		NB: Pope Ave	107.5	188.9	14.4	28.3
		SB: PBR	299.3	450.4	52.3	66.5
	PM	EB: Greenwood Dr	173.7	305.1	103.2	193.0
		WB: US 278B	239.3	366.4	98.2	168.3
		NB: Pope Ave	142.6	227.7	7.8	13.0
		SB: PBR	198.7	310.7	16.7	35.0



2030 TRAFFIC SIGNAL

LEVEL-OF-SERVICE SUMMARY¹

Intersection	Peak Hour	5-Year (2020) Signalization			15-Year (2030) Signalization		
		V/C ²	Delay ³	LOS ⁴	V/C	Delay	LOS
Sea Pine Circle	AM	0.43	47.1	D	0.51	49.6	D
	NOON	0.59	53.6	D	0.66	55.1	E
	PM	0.71	47.6	D	0.81	50.1	D

1. Calculations completed using the 2010 HCM methodology.

2. V/C=Volume-to-capacity ratio, basis HCM 2000.

3. Delay in seconds-per-vehicle.

4. Level-of-Service.

2030 Two-Lane Circle (N/S)

LEVEL-OF-SERVICE SUMMARY¹

Intersection	Peak Hour	Approach	MITIGATED	
			5-Year Two-Lane (N/S) 2020	15-Year Two-Lane (N/S) 2030
Seapines Circle	AM	EB: Greenwood Dr	48.7	109.3
		WB: US 278B	50.2	103.9
		NB: Pope Ave	6.4	7.7
		SB: PBR	16.5	26.9
	NOON	EB: Greenwood Dr	34.7	76.8
		WB: US 278B	112.3	189.7
		NB: Pope Ave	8.6	11.4
		SB: PBR	18.2	31.9
	PM	EB: Greenwood Dr	53.3	114.5
		WB: US 278B	110.5	185.1
		NB: Pope Ave	9.7	13.9
		SB: PBR	12.8	19.0

2030 PARALLEL ROADS

CONNECTOR ALTERNATIVE	2030 VOLUMES XX=Alt, (XX)= Baseline	New Roadway Connector Volumes
<i>#2 ROADWAY EASTSIDE OF POPE AVE</i>		
<i>Shipyard to Lagoon</i>		
Pope Ave	14,344 (15,301)	1,571
<i>#3 ROADWAY EASTSIDE OF POPE AVE</i>		
<i>New Orleans to Lagoon</i>		
Pope Ave	24,114 (31,054)	5,607
<i>#4 ROADWAY WESTSIDE OF POPE AVE</i>		
<i>Office to Cordillo</i>		
Pope Ave	20,851 (31,054)	8,330
Northwest Connector		16,551

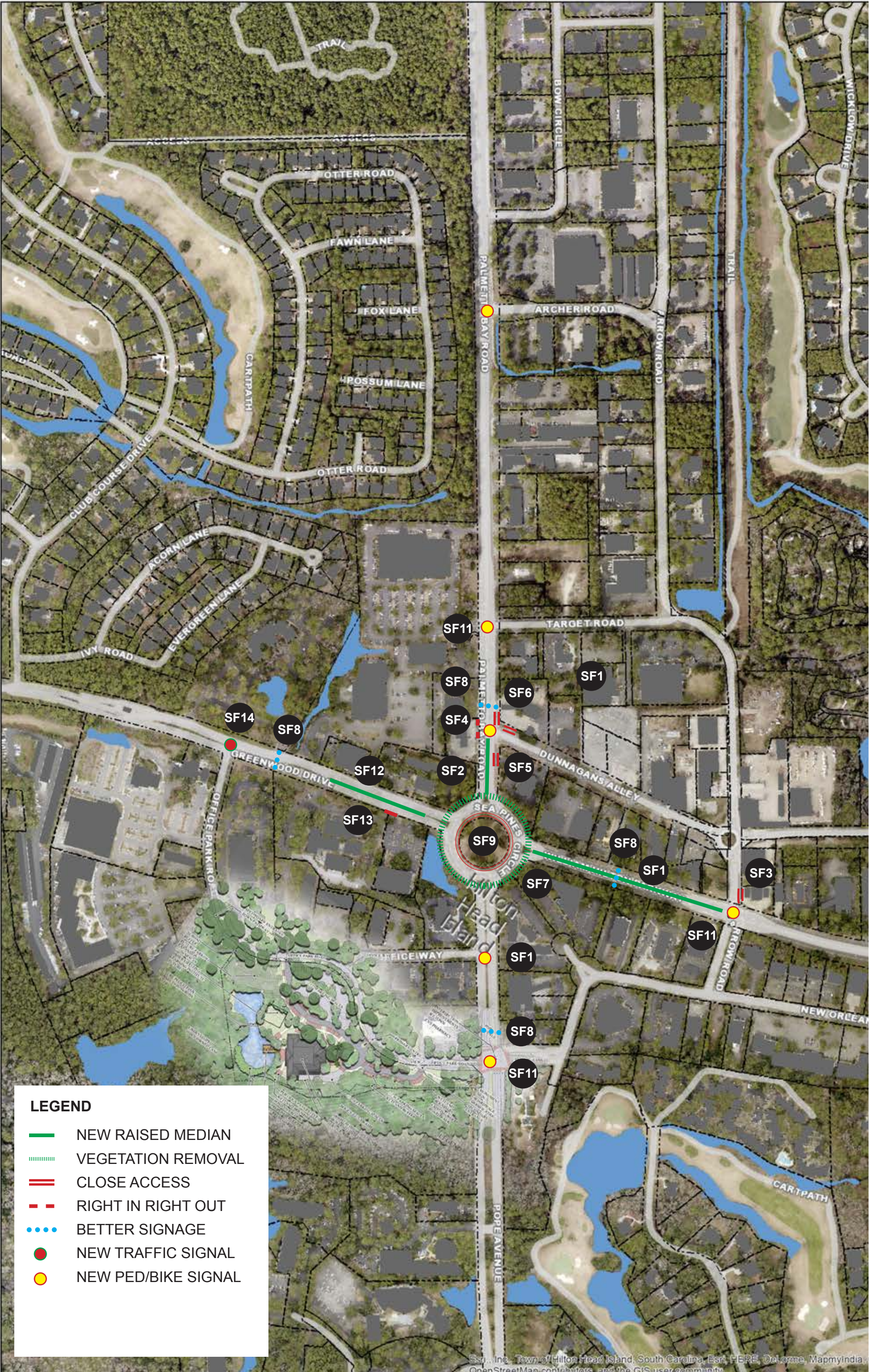
CIRCLE COMPARISON

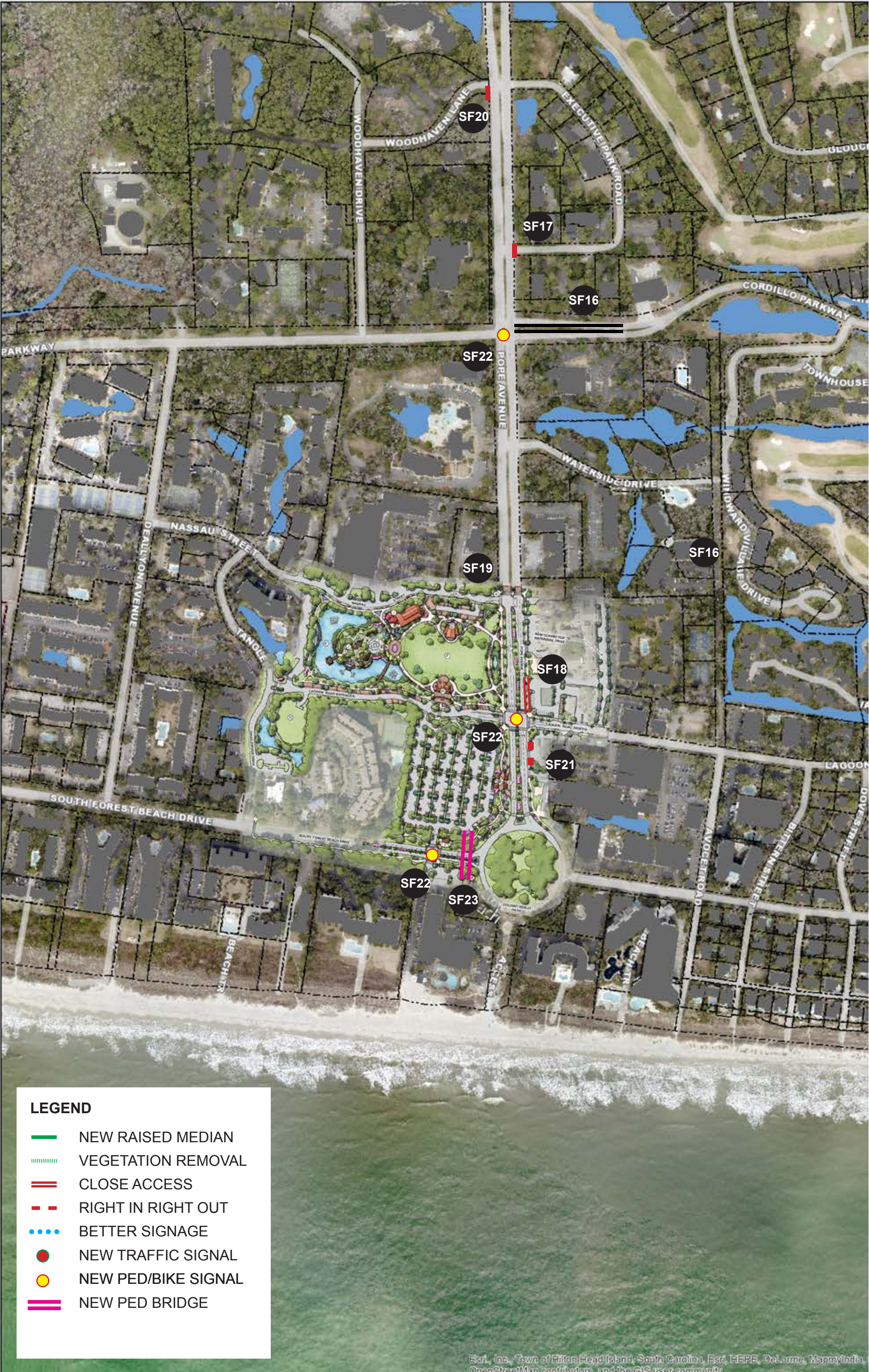
CONDITION/ ALTERNATIVE	2020 LMO SATISFACTION	2030 LMO SATISFACTION
<i>ONE-LANE CIRCLE (EXISTING)</i>	NO	NO
<i>NORTHWEST CONNECTOR (Publix)</i>	NO	NO
TRAFFIC SIGNALIZATION	YES	NO
<i>FLY-OVER (Single Lane Circle)</i>	YES	NO
<i>TWO-LANE N/S CIRCLE (Free-Right Turns)</i>	YES	NO
<i>TWO-LANE N/S CIRCLE (Right Turns Enter Circle)</i>	NO	NO

Decision Matrix Update for Review at 03-09-2016 Circle to Circle Committee Meeting

	IMPROVE SAFTEY AND FUNCTION	LOCATION	PURPOSE	OWNERSHIP	IMPROVEMENT	COST ASSUMPTION	DIMENSION ASSUMPTION	POTENTIAL COST	IMPACT ON AESTHETICS	ACCEPTABLE	ACCEPTABLE WITH RESERVATIONS	NOT ACCEPTABLE	COMMENTS
	PALMETO BAY ROAD CORRIDOR - NORTH OF THE CIRCLE												
SF 1	Raised and landscaped median on 278b AND SP Circle to Arrow Rd	EAST OF ROUND ABOUT	LIMIT TURNING MOVEMENTS AND BEAUTIFICATION	SCDOT	CONSTRUCT NEW MEDIAN	\$20 PER SQUARE FEET	900 FT X 8 FEET	\$144,000	ADDS LANDSCAPE				NEEDS COOPERATION FROM AFFECTED OWNERS /OPERATORS
SF2	Landscaped Median To Dunnagans Alley to allow southbound left in	NORTH OF ROUNDABOUT	LIMIT TURNING MOVEMENTS AND BEAUTIFICATION	SCDOT	CONSTRUCT NEW MEDIAN	\$20 PER SQUARE FEET	250 FT X 12 FEET	\$60,000	ADDS LANDSCAPE				NEEDS COOPERATION FROM AFFECTED OWNERS /OPERATORS
SF3	Close Kangaroo access on Arrow closest to 278	NORTH OF 278B OF ARROW	LIMIT TURNING MOVEMENTS CLOSE TO 278B	SCDOT	ADD CURB AND REPAIR PAVEMENT AND ADD SIGNAGE	\$35 PER LIN FT PLUS COST OF SIGN	100 FEET	\$4,500	CLEANER STREETSCAPE				NEEDS COOPERATION FROM AFFECTED OWNERS /OPERATORS
SF4	Dunnagans and Enmark RIRO w/ southbound left remaining	PALMETTO BAY ROAD ACROSS FROM DUNNAGANS	MANAGE ACCESS TO AVOID CONFLICTS	SCDOT	ADD CURB, REPAIR PAVEMENT AND ADD SIGNAGE	\$35 PER LIN FT PLUS COST OF SIGN	25 FEET	\$2,500	CLEANER STREETSCAPE				NEEDS COOPERATION FROM AFFECTED OWNERS /OPERATORS
SF5	Close RIRO access to South State Bank - access from Dunnagans	NORTHEAST QUADRANT OF CIRLCE	MANAGE ACCESS TO AVOID CONFLICTS	SCDOT	ADD CURB, REPAIR PAVEMENT, REPAIR LANDSCAPE AND ADD SIGNAGE	\$15 PER SQ FT	2,000 SQ FT	\$30,000	CLEANER STREETSCAPE				NEEDS COOPERATION FROM AFFECTED OWNERS /OPERATORS
SF6	Close access from Dunnagan's Alley to Island Tire	NORTH OF DUNNAGANS ON PALMETTO BAY ROAD	MANAGE ACCESS TO AVOID CONFLICTS	SCDOT	ADD CURB, REPAIR PAVEMENT, REPAIR LANDSCAPE AND ADD SIGNAGE	\$15 PER SQ FT	2,000 SQ FT	\$30,000	CLEANER STREETSCAPE				NEEDS COOPERATION FROM AFFECTED OWNERS /OPERATORS
	SEA PINES CIRCLE												
SF7	Vegetation removal to improve sight distance	AROUND THE CIRCLE	IMPROVE SIGHT DISTANCE SO THAT CARS ARE MORE VISIBLE	SCDOT	TRIM VEGETATION	IN HOUSE	NA	\$5,000 - \$10,000	MORE MANAGED LANDSCAPE				
SF8	Improve Sea Pines Circle signage location, size and font	BEFORE THE CIRCLE ON ALL 4 LEGS	ALERT DRIVERS TO LANE CHOICES SO THAT THEY PREPARE FOR THE CIRCLE	SCDOT	DESIGN AND FABRICATE SIGNS. CONSTRUCT SIGN BASES	\$1,500 PER SIGN	12 SIGNS	\$18,000	HELPS VISITOR WAYFIND EASIER				
SF9	Change stand up curbs around SP Circle to rolled curbs	CENTER OF THE CIRCLE	ALLOW ROLLING OVER FOR TRUCK TO AVOID CONFLICTS	SEA PINES CSA	NEW CURBING	\$20.00 PER LIN FT	1,000 FT	\$20,000	MAKES THE CIRCLE FEEL LESS TIGHT				STAND UP CURB WAS INSTALLED TO DISCOURAGE IMPACTS ON CENTER OF CIRCLE
	278B / 278 / POPE AVENUE - GENERAL												
SF10	Signal Phasing on 278B AND 278	278B AND 278	BETTER TIMING OF SIGNALS TO SPACE CARS BETTER	TOWN	COORDINATE WITH SCDOT	\$0	\$0						
SF11	Pedestrian Signals at key intersections	278B , 278, POPE OTHER	TO ALLOW FOR SAFER PEDESTRIAN CROSSING	SCDOT	APPROVAL FROM SCDOT	\$25,000 PER SIGNA	6-10 SIGNALS	\$150,000 - \$250,000	PLACES PRIORITY ON PEDESTRIAN				MAY REQUIRE WARRENTS OR USE OF HAWK SIGNAL OR SIMILAR

	IMPROVE SAFTEY AND FUNCTION	LOCATION	PURPOSE	OWNERSHIP	IMPROVEMENT	COST ASSUMPTION	DIMENSION ASSUMPTION	POTENTIAL COST	IMPACT ON AESTHETICS	ACCEPTABLE	ACCEPTABLE WITH RESERVATIONS	NOT ACCEPTABLE	COMMENTS
	GREENWOOD AVENUE / SEA PINES												
SF 12	Modify approach to Circle from Greenwood Drive - improve merge area	GREENWOOD DRIVE WEST OF CIRCLE	BETTER SPACING	SEA PINES CSA	NEW ROAD LANES	LS		\$50,000	CLEANER STREETSCAPE				IMPACT TO SEA PINES GATE AND WELCOME CENTER.
SF 13	Reilly's /Galleria - RIRO only - no cross median movement	GREENWOOD DRIVE WEST OF CIRCLE	REDUCE CONFLICTS	SEA PINES CSA	NEW CURB, REPAIR PAVEMENT AND SIGNAGE	\$35 PER LIN FT PLUS COST OF SIGN	25 FEET	\$2,500	CLEANER STREETSCAPE				NEEDS COOPERATION FROM AFFECTED OWNERS /OPERATORS
SF14	Signalized intersection at Office Park and Greenwood intersection	GREENWOOD DRIVE WEST OF CIRCLE	SPACING INTO THE CIRCLE	SEA PINES CSA	PROVIDE NEW SIGNAL	\$150,000	LS	\$150,000					IMPACT TO SEA PINES GATE AND WELCOME CENTER.
SF15	Request Sea Pines CSA close some curb cuts on Greenwood Dr	GREENWOOD DRIVE WEST OF CIRCLE	SPACING INTO THE CIRCLE AND TO REDUCE CONFLICTS	SEA PINES CSA	NEW CURB, REPAIR PAVEMENT AND SIGNAGE	\$35 PER LIN FT PLUS COST OF SIGN	100 FT	\$5,000	CLEANER STREETSCAPE				NEEDS COOPERATION FROM AFFECTED OWNERS /OPERATORS
	POPE CORRIDOR SOUTH OF SEA PINES CIRCLE												
SF16	Cordillo Parkway - revise westbound approach of Shipyard for Multi-use path clearance	EAST SIDE OF CORDILLO AND POPE INTERSECTION	PEDESTRIAN SAFETY	SCDOT	NEW TRAVEL LANE	\$150 PER FT	500 LIN FT	\$75,000	PLACES PRIORITY ON PEDESTRIAN				
SF17	Exec Park Road South - convert to RIRO , no left turn out	EAST OF POPE	ACCESS MANAGEMENT	SCDOT	NEW CURB AND SIGNAGE	\$35 PER LIN FT PLUS COST OF SIGN	25 FEET	\$2,500	CLEANER STREETSCAPE				NEEDS COOPERATION FROM AFFECTED OWNERS /OPERATORS
SF18	Close 1 of 2 accesses to gas station on Lagoon/Pope	EAST OF POPE BELOW LAGOON	ACCESS MANAGEMENT	SCDOT	NEW CURB AND SIGNAGE	\$35 PER LIN FT PLUS COST OF SIGN	25 FEET	\$2,500	CLEANER STREETSCAPE				NEEDS COOPERATION FROM AFFECTED OWNERS /OPERATORS
SF19	Nassau Street - southbound left turn lane for U Turns	POPE AND NASSAU	BETTER FUNCTION	SCDOT	NEW TRAVEL LANE AND ADDITIONAL ROW	\$150 PER FT PLUS COST OF ROW	500 LIN FT	\$75,000 PLUS COST OF ROW	PLACES PRIORITY ON PEDESTRIAN				WHY NOT DO THE SAME WITH BICYCLE BILLY'S?
SF 20	No Left Turn from Woodland to Pope	POPE AND WOODLAND	ACCESS MANAGEMENT	SCDOT	SIGNAGE	LS	NA	\$500	REDUCES CONFLICTS				
	COLIGNY CIRCLE CORRIDOR												
SF21	Coligny Plaza Access - Preserve left turn INTO Coligny and prevent left turn out	COLIGNY PLAZA	ACCESS MANAGEMENT	SCDOT	NEW CURB, REPAIR PAVEMENT ADD SIGNS	\$35 PER LIN FT PLUS COST OF SIGN	25 FEET	\$2,500	CLEANER STREETSCAPE				NEEDS COOPERATION FROM AFFECTED OWNERS /OPERATORS
SF22	New stop lights and crosswalk configuration as part of Town Park project planned to address these issues	POPE AVENUE	PED SAFETY	SCDOT	INSTALL NEW STOP LIGHT	LS		\$150,000					
SF23	Pedestrian bridge	POPE AVENUE AT PARK	PED SAFETY	TOWN	BRIDGE CROSSING POPE	\$350 PER SQ. FT.	12 X 100	\$420,000	CAN BE DESIGNED WITH AN ARTIST				MAY NOT BE THE MOST COST EFFECTIVE SOLUTION





LEGEND

- NEW RAISED MEDIAN
- VEGETATION REMOVAL
- CLOSE ACCESS
- RIGHT IN RIGHT OUT
- BETTER SIGNAGE
- NEW TRAFFIC SIGNAL
- NEW PED/BIKE SIGNAL
- NEW PED BRIDGE

Proposed Pathway Types

#1 - Multiuse Pathways - Like those currently in place across the island and planned for mainland connection for bike and pedestrian traffic.

#2 - Designated Arterial Pathways - Those designed to safely accommodate both high volume bike or pedestrian traffic. These arterials can either be combined with pavement markings to designate ped/bike lanes or the arterials can be separate and marked accordingly.

#3 - On-road Bike Lanes - Those for use by active cyclists. Designated bike lanes are on the side of the road to separate bikes and cars, allowing free flow of traffic in the car and bike lanes.

#4 - Beach Bike Trails - Bike only beach access(on/off) and proper wayfaring. For example, Coligny Beach to Adler Park or Coligny Beach to Collier Park. This is a key activity for guests to experience and "report back home" to potential new guests.

Currently Planned

Exiting Pathways

- Boardwalk
- Crosswalk
- Pathway
- Sidewalk
- Sidewalk and Bike Lane
- Private Pathways



Circle to Circle Proposed Pathways

Revised: March, 2016

